

---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

---

**CHAPTER 12-2 QUARTERS CONSTRUCTION PRIORITY SYSTEM**

12-2.1	INTRODUCTION . . . . .	(12-2)	1
	Definitions . . . . .	(12-2)	2
12-2.2	QUARTERS CONSTRUCTION PRIORITY SYSTEM METHODOLOGY . . . . .	(12-2)	4
12-2.3	PHASE I . . . . .	(12-2)	5
12-2.4	PHASE II . . . . .	(12-2)	12
	Staffing Roster and Analysis . . . . .	(12-2)	12
	Existing Government Quarters Units . . . . .	(12-2)	15
	Local Private Sector Housing Market . . . . .	(12-2)	19
	Additional Government Quarters Units Required . . . . .	(12-2)	22
12-2.5	PHASE III . . . . .	(12-2)	26
	Housing Verification Survey Report . . . . .	(12-2)	27
	Program Justification Document/Program of Requirements for Quarters . . . . .	(12-2)	37

**12-2.1 INTRODUCTION**

Many Indian Health Service (IHS) health care facilities are located in rural and often remote locations where housing is not available for employees. It is IHS policy to ensure the availability of safe, suitable housing for personnel essential to the continuity of the health care delivery system and for those personnel required to protect Government property. In other limited circumstances, Government quarters units may be provided for employees because of the remoteness of the work site from available private sector housing. The IHS owns and maintains quarters units at some locations. When a new or replacement health care facility is planned under the Health Facilities Construction Priority System (HFCPS), IHS reviews the need to construct additional quarters units as part of planning for the new facility.

However, many existing health care facilities expand staff using mechanisms other than the HFCPS. In some cases these expansions generate a need for additional housing. The IHS periodically reviews these quarters needs using the Quarters Construction Priority System (QCPS), which was first implemented in 1987. The QCPS permits the IHS to review its needs for quarters units and develop a list of high priority quarters construction projects. This list is the basis for IHS budget requests for quarters construction projects. This document describes the IHS QCPS and outlines the responsibilities of the IHS and other entities during its implementation.

## Definitions

- Demonstrated Preference Community - An incorporated or unincorporated city or town (located 70 road kilometers (km) or less from the health care facility) having a year-round population of less than 1,500, and where a demonstrated preference to reside is indicated by current non-local IHS staff presently residing in this community.
- Government Quarters Unit - Government controlled housing units which are or can be assigned to non-local IHS personnel. IHS Government quarters units are designated as either "rental" or "transient" as defined in the Quarters Management Program, Chapter 13, Part V, Indian Health Manual.
  - Rental Quarters Units - Quarters intended for other than transient occupancy by an IHS employee or other authorized person. Persons assigned to rental quarters units are charged for rent and utilities.
  - Transient Quarters Units - Quarters units intended for short-term occupancy of up to 90 days. Their purpose is to accommodate official visitors, guests, volunteers, short-term employees and contractors, and other transient personnel. Persons assigned to transient quarters units are charged for rent and utilities.
- Housing Verification Survey Report (HVSR) - The HVSR is a survey of Government quarters units and private sector housing to determine the total number of local housing units (both Government and privately controlled) available to IHS for occupancy by IHS staff at a particular location.
- Local Employee - An employee who resided 70 road km or less from the health care facility at the time of their employment in that facility.
- Local Private Sector Housing Unit - This is all types of housing units, except Government quarters units, located 70 road km or less from the health care facility, which could be available to an IHS employee to own, rent, or otherwise occupy.
- Non-Local Employee - An employee who resided more than 70 road km from the health care facility at the time of their employment in that facility.
- Quarters Construction Priority List - A list of quarters construction projects, each of which have been evaluated by the

---

**PART 12 - PRIORITY SYSTEMS**

---

QCPS methodology and have a Program Justification Document/Program of Requirements for Quarters (PJDQ) approved by the Associate Director, Office Of Environmental Health and Engineering (OEHE). The priority list for new quarters construction is generally maintained at 10 projects. In the annual funding cycle only a portion of these projects may be funded for construction and removed from the priority list.

- Quarters Construction Priority System - The QCPS is a three-phase process that permits the IHS to review, evaluate, and rank proposals for quarters construction projects based on the relative need for quarters units. Each phase provides a progressively more rigorous evaluation so that only the projects with the greatest need are advanced through the three phases and ultimately added to the Quarters Construction Priority List.
- Quarters Quality Rating - An evaluation of both the interior and exterior condition of each Government quarters unit. This is the rating reported in the IHS Quarters Tracking Information System (QTIS) database. The Quarters Management Program, Chapter 13, Part V, of the Indian Health Manual establishes the following quarters quality ratings: excellent, good, fair, poor, and obsolete/substandard. The Area Realty Officer, with assistance from the Area facilities management staff determines the quality rating each time a quarters unit is reconditioned or made available for occupancy.
- Quarters Tracking Information System - A computerized inventory (database) of IHS controlled quarters units. The QTIS is used to monitor quarters utilization and Area implementation of quarters management policies and practices.
- Recognized Community - An incorporated or unincorporated city or town (located 70 road km or less from the health care facility) having a year-round population of 1,500 or more.

### **12-2.2 QUARTERS CONSTRUCTION PRIORITY SYSTEM METHODOLOGY**

The QCPS is a three-phase process that permits the IHS to review, evaluate, and rank proposals for quarters construction projects based on the relative need for quarters units. Each phase provides a progressively more rigorous evaluation so that only the projects with the greatest need are advanced through the three phases and ultimately added to the Quarters Construction Priority List.

The process begins when Headquarters IHS solicits Phase I proposals from the Area Offices. Phase I is essentially a screening process wherein all proposals for quarters, at locations where IHS is not currently

---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

---

planning a new or replacement health care facility, are reviewed and prioritized according to the relative need for quarters units. The information required in Phase I is easily obtained and verified, yet provides sufficient data to permit a preliminary assessment of the need for quarters units. Area Offices submitting proposals which receive high Phase I priority scores are invited to apply for Phase II consideration.

Phase II proposals contain data obtained from more detailed analyses. Appropriate Area Offices develop actual staffing lists that show the housing status of each currently filled position. They also predict whether vacant and new positions will be filled with local or non-local employees. Documentation is provided showing the status of all Government owned or leased quarters units located 70 road km or less from the proposed location. In addition, the availability of local private sector housing is examined. This information is summarized, evaluated, and prioritized in a Phase II QCPS worksheet. Area Offices submitting proposals receiving the highest scores in Phase II are asked to submit Phase III proposals.

During Phase III, the appropriate Area Offices prepare a PJDQ for proposals still being considered. One requirement of the PJDQ is that the appropriate Engineering Services (ES) prepares a HVSR. The HVSR is a survey of Government quarters units and local private sector housing to determine how much housing is available for IHS staff at a particular location. The findings documented in the ES survey are used by the Area Office in its final analysis to determine the number of quarters units justified for construction. Quarters construction is justified only if the number of Government and private sector housing available, as determined by the HVSR, is less than the number of quarters units required for facility staffing requirements.

Headquarters IHS reviews all PJDQs submitted by the Area Offices. Those which justify construction of quarters units are approved by the Associate Director, of Environmental Health and Engineering. After approval, these projects are added to the bottom of the Quarters Construction Priority List in the order they are approved.

Any projects which are not approved during application of the QCPS may submit a new Phase I application in the next cycle. They will be reviewed equally with all applications without consideration of performance on past applications.

In the annual funding cycle only a portion of these projects may be funded for construction and removed from the priority list. Generally no more projects will be selected to advance to Phase III than there are vacancies on the priority list, and then, only if those projects demonstrate the highest need.

### 12-2.3 PHASE I

The IHS rationale for providing Government quarters units is based upon the absence of a local private sector housing and/or the determination that necessary services or adequate protection of Government property cannot be accomplished satisfactorily without essential staff on-site housing. The IHS constructs quarters units to meet the Agency's primary need to provide housing for essential staff in close proximity to its health care facilities. The IHS justifies the number of Government quarters units it constructs by its determination that there is a present and prospective lack of available Government and private sector housing within a reasonable commuting distance of the IHS installation. In other limited circumstances, Government housing may be provided for staff because of the remoteness of the work site from available private sector housing.

Phase I of the QCPS is based on easily obtained and verified information which is used to determine the need for additional quarters units and takes into account an adjustment for the relative isolation of the location. The intent of Phase I is to identify quickly and easily those projects which exhibit the greatest need for new or replacement quarters units so they may be more closely scrutinized in Phase II. The requested information is summarized on the Quarters Construction Priority System worksheet for Phase I. The Area Office must complete this worksheet for all locations where it is anticipated that new or replacement quarters units will be required. Quarters units may be requested to replace existing units which do not meet minimum standards, or they may be requested to support a health care facility where it is anticipated that increased staff will need additional quarters units. The Phase I worksheet and accompanying table to determine the "Isolation Factor" is shown in Exhibit 1 and Table 1 respectively.

Instructions for completing the worksheet are as follows:

- Area - Enter the name of the IHS Area Office.
- Date - Enter the date that the Phase I QCPS worksheet was completed.
- Service Unit - Enter the name of the IHS service unit in which the proposed new quarters units will be located.
- Location - Describe the specific location where the proposed new quarters units will be located. If appropriate, use the installation name which matches the IHS QTIS database.

---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING

---

**PART 12 - PRIORITY SYSTEMS**

---

- Contact Person/Telephone - Provide the name and telephone number of the person at the Area Office or service unit to contact if additional information is required about the worksheet.
- Total Authorized Positions Supported by IHS (A) - List those positions which have been congressionally authorized for the location where new quarters units are proposed. The "currently filled" authorized positions are those for which staff have been hired at the time the QCPS Phase I worksheet is completed, while "vacant" positions are those for authorized vacancies which have not been filled. If additional positions are to be supported once a new or improved health care facility is completed, enter this number as "new" positions. This number must match the staffing requirements included in the approved Program Justification Document (PJD) or Project Summary Document (PSD) for the health care facility. The sum of the currently filled, vacant, and new positions is entered as the "Total Authorized Positions Supported by IHS."
- Number of Government Owned or Leased Quarters Units Currently Occupied by "Non-Local" IHS Staff (B) - This is the number of IHS, Bureau of Indian Affairs (BIA), or other Government owned or leased quarters units which are currently occupied by non-local IHS staff. The term "non-local" refers to those IHS employees who resided more than 70 road km from the health care facility at the time of their employment in that facility.

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

**Exhibit 1**                      Quarters Construction Priority System  
Phase I

Area \_\_\_\_\_ Date \_\_\_\_\_  
Service Unit \_\_\_\_\_ Location \_\_\_\_\_  
Contact Person \_\_\_\_\_ Telephone \_\_\_\_\_

Total Authorized Positions Supported by IHS Currently Filled _____ + Vacant _____ + New _____ = (A) _____	
Number of Government Owned or Leased Quarters Units Currently Occupied by "Non-Local" IHS Staff (B) _____	
Number of Quarters Units Required for "Non-Local" Staff Expected to Fill "Vacant" and " New" IHS Positions Vacant _____ + New _____ = _____ x 0.9 = (C) _____	
Total Quarters Units Required = (B+C) (D) _____	
Number of Existing IHS Quarters Units (E) _____	
Number of "Poor" or "Obsolete/Substandard" IHS Quarters Units (F) _____	
Number of Other Government Quarters Units Available to IHS. Agency _____ (G) _____	
Total Government Quarters Units Available = E - F + G (H) _____	
Additional Quarters Units Required = D - H (I) _____	
Quarters Requirement Ratio = 100(I/A) (If negative, enter 0) (J) _____	
Weighted Isolation Factor (from tabulations below) (K) _____	
<b>QUARTERS CONSTRUCTION PRIORITY SCORE = J x K</b> (L) _____	

<b>WEIGHTED ISOLATION FACTOR</b>							
List in order (closest first), the three closest communities with a population of at least 1,500. Use Table I to find the Isolation Factor.							
Community, State	Population	Distance (Road Km)	Isolation Factor	X	0.5	=	
	—			X	0.5	=	
	—			X	0.2	=	
	—			X	0.1	=	
SUM = WEIGHTED ISOLATION FACTOR (Enter in Line K above)							

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

**Table 1**

ISOLATION FACTOR

DISTANCE IN ROAD KILOMETERS FROM COMMUNITY TO HEALTH CARE FACILITY  
(IF NOT ACCESSIBLE BY ROAD, USE AN ISOLATION FACTOR OF 1.0)

POPULATION	8	15	30	45	60	75	90	110	130	160	200	230	260
1,500 - 1,999	.04	.08	.16	.24	.32	.40	.48	.56	.64	.80	.97	1.00	1.00
2,000 - 2,999	.04	.07	.14	.21	.29	.36	.43	.50	.57	.72	.86	1.00	1.00
3,000 - 3,999	.03	.06	.13	.19	.26	.32	.39	.45	.52	.65	.78	.91	1.00
4,000 - 4,999	.03	.06	.12	.18	.24	.30	.36	.42	.48	.60	.73	.85	.97
5,000 - 5,999	.03	.06	.11	.17	.23	.29	.34	.40	.46	.57	.69	.80	.92
6,000 - 6,999	.03	.06	.11	.17	.22	.28	.33	.39	.44	.55	.66	.77	.88
7,000 - 7,999	.03	.05	.11	.16	.21	.27	.32	.37	.43	.53	.64	.75	.85
8,000 - 9,999	.03	.05	.10	.15	.20	.26	.31	.36	.41	.51	.61	.72	.82
10,000 - 11,999	.02	.05	.10	.15	.20	.24	.29	.34	.39	.49	.59	.69	.78
12,000 - 14,999	.02	.05	.09	.14	.19	.24	.28	.33	.38	.47	.57	.66	.76
15,000 - 17,999	.02	.05	.09	.14	.18	.23	.27	.32	.36	.45	.54	.63	.72
18,000 - 20,999	.02	.04	.09	.13	.17	.22	.26	.31	.35	.44	.52	.61	.70
21,000 - 24,999	.02	.04	.08	.13	.17	.21	.25	.30	.34	.42	.51	.59	.68
25,000 - 29,999	.02	.04	.08	.12	.16	.20	.25	.29	.33	.41	.49	.57	.66
30,000 - 34,999	.02	.04	.08	.12	.16	.20	.24	.28	.32	.40	.48	.56	.64
35,000 - 39,999	.02	.04	.08	.12	.16	.19	.23	.27	.31	.39	.47	.54	.62
40,000 - 49,999	.02	.04	.08	.11	.15	.19	.23	.26	.30	.38	.45	.53	.60
50,000 - 69,999	.02	.04	.07	.11	.14	.18	.22	.25	.29	.36	.43	.50	.58
70,000 - 99,999	.02	.03	.07	.10	.14	.17	.20	.24	.27	.34	.41	.48	.55
100,000 - 149,999	.02	.03	.06	.10	.13	.16	.19	.23	.26	.32	.39	.45	.52
150,000 - 199,999	.02	.03	.06	.09	.12	.15	.19	.22	.25	.31	.37	.43	.49
200,000 - 299,999	.01	.03	.06	.09	.12	.15	.18	.21	.24	.29	.35	.41	.47
300,000 - 399,999	.01	.03	.06	.08	.11	.14	.17	.20	.23	.28	.34	.40	.45
400,000 - 499,999	.01	.03	.05	.08	.11	.14	.16	.19	.22	.27	.33	.38	.44

**Example:** Find the Isolation Factor of a community with a population of 5,400 located 32 road km from the health care facility.

**Solution:**

1. In the "Population" column, find the row which contains the given population, i.e., 5,000 - 5,999.
2. Read across this row to the first "Distance" column which is greater than or equal to 32 km, i.e., 45.
3. Read the Isolation Factor, i.e., 0.17.



**PART 12 - PRIORITY SYSTEMS**

---

- Number of Quarters Units Required for "Non-Local" Staff Expected to Fill "Vacant" and "New" IHS Positions (C) - This is determined by estimating the number of currently vacant IHS positions and new IHS positions that are expected to be filled with "non-local" staff, i.e., employees residing greater than 70 road km from the health care facility at the time of their employment in that facility. This should be a realistic estimate taking into account the type of positions to be filled, the availability of qualified personnel from the local area, and past experience. It is expected that the ratio of non-local staff to total staff for the currently filled positions would provide a close approximation in determining this ratio for new and vacant positions. This total (vacant plus new positions to be filled with "non-local" staff) is multiplied by 90 percent to estimate the number of quarters units required. The 90 percent adjustment factor is based on the assumption that 10 percent of the non-local staff will prefer to build their house, choose to live more than 70 road km from the health care facility, or be married to another IHS employee and require only one quarters unit for both.
- Total Quarters Units Required (D) - Total quarters units required is the sum of the Government owned or leased quarters units currently occupied by non-local IHS staff (B) plus the quarters units required for vacant and new IHS positions expected to be filled with non-local staff (C).
- Number of Existing IHS Quarters Units (E) - Enter the number of all existing IHS owned or leased quarters units located 70 road km or less from the health care facility. This number should match the number of quarters units listed in the IHS QTIS database.
- Number of "Poor" or "Obsolete/Substandard" IHS Quarters Units (F) - This is the number of quarters units in the total number of existing IHS quarters units (E) which do not meet minimum standards, i.e., those classified as "poor" or "obsolete/substandard." These classifications, as defined in the Quarters Management Program, Chapter 13, Part V, Indian Health Manual, should be consistent with the designation listed in the IHS QTIS database.
- Number of Other Government Quarters Units Available to IHS (G) - This is the number of other Government quarters units that meet minimum standards which are available to IHS for occupancy by IHS staff. These are units owned or leased by other Government agencies located 70 road km or less from the health care facility. Also identify the Government agency name in the space provided.
- Total Government Quarters Units Available (H) - This is the number of Government quarters units available for occupancy by IHS staff.

---

**PART 12 - PRIORITY SYSTEMS**

---

This is determined by subtracting the number of poor or obsolete/substandard quarters units (F) from the sum of the existing IHS quarters units (E) and the number of other Government owned or leased quarters units available to IHS (G).

- Additional Quarters Units Required (I) - This is the total number of quarters units required (D) minus the number of available Government quarters units (H). This is the number of additional quarters units required to house non-local employees for whom Government quarters units are not available. If this number is less than one, no additional quarters units are required.
- Quarters Requirement Ratio (J) - This is 100 times the ratio of the additional quarters units required (I) to the total authorized positions supported by IHS (A). If this ratio is negative (because there is a negative need for additional quarters units), enter zero as the quarters requirement ratio.
- Weighted Isolation Factor (K) - This factor is used to adjust the quarters requirement ratio to account for the relative isolation of a specific health care facility location. The data is compiled in the tabulations at the bottom of the Phase I QCPS worksheet. The model used to determine the weighted isolation factor assumes that relative isolation is directly proportional to the distance a specific location is from communities with a population of at least 1,500. It also assumes that the larger the population of a nearby community, the lower the isolation factor, i.e., isolation of a location is inversely proportional to the population of the adjacent communities.

Table I provides isolation factors for communities with various distance and population combinations. The "weighted isolation factor" is determined by evaluating the isolation factor for the three closest communities with a population of at least 1,500, including the community in which the health care facility is located, if appropriate. These three isolation factors are combined into a single weighted isolation factor by allocating 50 percent of the factor for the closest community, 30 percent for the second closest community, and 20 percent for the third closest community.

When completing the tabulations at the bottom of the Phase I QCPS worksheet to determine the weighted isolation factor, use population and distance figures taken from the latest edition of the Rand McNally Road Atlas. The distance is based on road km using the most time efficient route. For locations where a community is not accessible by roads (e.g., rural locations in bush Alaska), an isolation factor of 1.00 is applied.

---

**PART 12 - PRIORITY SYSTEMS**

---

- QUARTERS CONSTRUCTION PRIORITY SCORE (L) - This is the product of the "weighted isolation factor" and the "quarters requirement ratio."

#### **12-2.4 PHASE II**

Phase II of the QCPS expands on the data provided in Phase I. The information, as detailed in the following sections, is required.

- Staffing roster and analysis.
- Status of all existing quarters units, including assignable IHS owned or leased quarters units and other Government quarters units which are available for occupancy by IHS staff.
- Availability of private sector housing units.
- Determination of additional Government quarters units required.

##### A. Staffing Roster and Analysis

The information concerning staff housing status is provided in a QCPS worksheet entitled "Phase II - Staffing Roster" as shown in Exhibit 2. Headquarters IHS validates the staffing data using staffing records and the IHS Resource Requirements Methodology. Guidance for this worksheet is described below.

- Area - Enter the name of the IHS Area Office.
- Date - Enter the date this QCPS Phase II worksheet was completed.
- Service Unit - Enter the name of the IHS service unit in which the proposed new quarters units will be located.
- Location - Describe the specific location where the proposed new quarters units will be located. If appropriate, use the installation name which matches the IHS QTIS database.
- Contact Person/Telephone - Provide the name and telephone number of the person at the Area Office or service unit to contact if additional information is required about the worksheet.
- Position - List those positions which have been congressionally authorized for the location where new quarters units are proposed. If the health care facility is being operated by someone other than IHS, e.g., a tribe, then include only those positions which are funded by IHS.

**PART 12 - PRIORITY SYSTEMS**

---

- Position Status (Filled/Vacant/New) - Check the appropriate column which describes the status of the position. The "filled" authorized positions are those for which staff have been hired at the time the QCPS worksheet for Phase II is completed, while "vacant" positions are those for authorized vacancies which have not been filled. "New" positions are those to support a new or improved health care facility when it is completed and must match the staffing requirements included in the approved PJD for the health care facility.
- Employee Status (Local/Non-Local) - Check the appropriate column to describe whether the position is filled or is expected to be filled with a "local" or "non-local" employee. The term non-local refers to those IHS employees who resided more than 70 road km from the health care facility at the time of their employment. For vacant and new positions, this is an estimate of the positions that are expected to be filled with non-local staff, i.e., employees residing more than 70 road km from the health care facility at the time of their employment in that facility. This should be a realistic estimate taking into account the type of positions to be filled, the availability of qualified personnel from the local area, and past experience. The ratio of non-local staff to total staff for the currently filled positions should provide a close approximation in determining this ratio for new and vacant positions.

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

<b>Exhibit 2</b>	<b>Quarters Construction Priority System Phase II - Staffing Roster</b>
------------------	---

<b>Exhibit 2</b>	<b>Quarters Construction Priority System Phase II - Staffing Roster</b>
------------------	---

Area _____		Date _____	
Service Unit _____		Location _____	
Contact Person _____		Telephone _____	

  

Position	Position Status			Employee Status		Housing Type*		
	Filled	Vacant	New	Local	Non-Local	GQ	LP	NP
Totals								

\*Complete only for filled positions

GQ = Government Quarters  
 LP = Local Private Sector Housing  
 NP = Non-Local  
 Private Sector Housing

Page \_\_\_\_ of \_\_\_\_

**PART 12 - PRIORITY SYSTEMS**

---

- Housing Type (GQ/LP/NP) - For each "filled" position listed, check the column which indicates the type of housing utilized by that position, i.e., where the employee currently resides. There are three choices:
  - Government Quarters (GQ) - This includes existing IHS quarters units which are IHS owned or leased and located 70 road km or less from the health care facility. It also includes other Government quarters units owned or leased by other Government agencies located 70 road km or less from the health care facility, which are available to IHS for occupancy by IHS staff.
  - Local Private Sector Housing (LP) - This is all types of housing units, except Government quarters units, located 70 road km or less from the health care facility, which the employee owns, rents, or otherwise occupies.
  - Non-Local Private Sector Housing (NP) - This is all types of housing units, except Government quarters units, located more than 70 road km from the health care facility, which the employee owns, rents, or otherwise occupies.
- Totals - Provide totals at the bottom of each column.
- Page Number - For locations where more than 20 positions are identified, it will be necessary to use multiple pages of the worksheet. Number each page consecutively beginning with page 1 and list the total number of pages, i.e., "Page 2 of 4."

The information contained in the "Phase II - Staffing Roster" worksheet is summarized in the "Phase II - Staffing Analysis" worksheet shown in Exhibit 3. Numbers are entered in this worksheet by category in a tree diagram format such that the sum of the parts always equals the total. This pictorial summary of the staffing at a health care facility is essential in determining the potential requirements for additional quarters units.

**B. Existing Government Quarters Units**

To be included with Phase II is documentation on the status of all existing Government quarters units (both IHS and those owned by other Government agencies) located 70 road km or less from the health care facility. The following information should be provided in tabular form similar to the example form provided in Exhibit 4.

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

**Exhibit 3**      Quarters Construction Priority System  
Staffing Analysis

Contact person _____		Telephone _____		
Authorized Positions	Position Status	Employee Status	Housing Type	
<div style="border: 1px solid black; padding: 2px; display: inline-block;">** Total</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Filled</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Local</div>	<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto;"></div> GQ	
			<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto;"></div> LP	
			<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto;"></div> NP	
		<div style="border: 1px solid black; padding: 2px; display: inline-block;">Non Local</div>	<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto;"></div> GQ	
			<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto;"></div> LP	
			<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto;"></div> JP	
	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Vacant</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Local</div>	<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto;"></div>	
			<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto;"></div> Non-Local	
		<div style="border: 1px solid black; padding: 2px; display: inline-block;">New</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Local</div>	<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto;"></div>
				<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto;"></div> Non-Local

GQ = Government Quarters

LP = Local Private Sector Housing

NP = Non-Local Private Sector Housing

**\*\*Total Authorized Positions equals total listed on "Phase II Staffing Roster" worksheet**

[illegible]



---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING

---

**PART 12 - PRIORITY SYSTEMS**

---

- Area - Enter the name of the IHS Area Office.
- Date - Enter the date this QCPS Phase II worksheet was completed.
- Service Unit - Enter the name of the IHS service unit in which the existing Government quarters units are located.
- Installation Number - Within each service unit, there may be more than one installation. The installation number in which the existing quarters units are located is taken from the IHS QTIS database.
- Location/Distance - Include the city, State, and road distance the existing Government quarters units are from the health care facility.
- Total Number of Government Quarters Units at This Location - Provide the total number of existing IHS Government quarters units and the total of those owned by other Government agencies (even if they are not available to IHS).
- Owner - List the Government agency that owns the quarters units, e.g., IHS, BIA, Department of Defense, etc.
- Building Number - Enter the five digit number assigned to the quarters unit which matches the IHS QTIS database.
- Quarters Unit Designation - Enter the IHS quarters unit designation as either "rental" or "transient" as defined in the Quarters Management Program, Chapter 13, Part V, Indian Health Manual.
- Quarters Unit Description - Enter the type of quarters unit, e.g., "Residence 2BR", "Apartment 1BR", "Trailer 2BR", etc., which matches the IHS QTIS database.
- Internal Condition - Enter the rating which matches the IHS QTIS database. The Quarters Management Program, Chapter 13, Part V, of the Indian Health Manual establishes the following quarters unit quality ratings: excellent, good, fair, poor, and obsolete/substandard. The Area Realty Officer, with assistance from the Area facilities management staff determines the quality rating each time a quarters unit is reconditioned or made available for occupancy.
- External Condition - Use the same criteria as "internal condition" above. The information on IHS Government quarters units should match the data in the IHS QTIS database, as the number of assignable IHS quarters units is verified using this database. If

---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

---

the IHS QTIS database is not current and contains inaccurate data, the information should be updated prior to submission of Phase II of the QCPS.

At locations where other Government agencies have an inventory of Government quarters units located 70 road km or less from the health care facility, report the total number of these other Government quarters units. In addition, provide the information shown in Exhibit 4, as appropriate, for each of those quarters units which may be available for occupancy by IHS staff.

C. Local Private Sector Housing Market

The third element to be provided by the Area Office in Phase II is a local housing market report which quantifies the availability of housing units for sale and rent from the private sector located 70 road km or less from the health care facility. This information is summarized in the "Phase II - Local Private Sector Housing Market" worksheet illustrated in Exhibit 5.

- Area - Enter the name of the IHS Area Office.
- Date - Enter the date this QCPS Phase II worksheet was completed.
- Service Unit - Enter the name of the IHS service unit in which the proposed new quarters units will be located.
- Location - Describe the specific location within the service unit where the proposed new quarters units will be located. If appropriate, use the installation name which matches the IHS QTIS database.
- Contact Person/Telephone - Provide the name and telephone number of the person at the Area Office or service unit to contact if additional information is required about the worksheet.

EXHIBIT 5

Quarters Construction Priority System

**Phase II - Local Private Sector Housing Market**

  

Area \_\_\_\_\_

Service Unit \_\_\_\_\_

Contact Person \_\_\_\_\_

Date \_\_\_\_\_

Location \_\_\_\_\_

Telephone \_\_\_\_\_

  

In the tables below, enter the average number of housing units available for sale and rent in communities located 70 road km or less from the health care facility. Include all local communities (including the community in which the health facility is located) with a population greater than 1,500 and any smaller local communities where there is a recurring base of available housing as evidenced by "non-local" IHS staff residing in those communities.

  

COMMUNITY STATE	POPULATION	DISTANCE (KM)	PERIOD COVERED BY SURVEY	
			From	To
			AVG. NO. OF PRIVATE SECTOR HOUSING UNITS FOR <b>SALE</b>	
Total				

  

COMMUNITY, STATE	POPULATION	DISTANCE (KM)	PERIOD COVERED BY SURVEY	
			From	To
			AVG. NO. OF PRIVATE SECTOR HOUSING UNITS FOR <b>RENT</b>	
Total				

**PART 12 - PRIORITY SYSTEMS**

---

- Community, State - List all communities located 70 road km or less from the health care facility (including the community in which the health facility is located) with a population of 1,500 or more and any smaller local communities where there is a recurring base of available housing as evidenced by "non-local" IHS staff residing in those communities.
- Population/Distance - Enter population and distance figures taken from the latest edition of the Rand McNally Road Atlas. The distance is the number of road km from the health care facility to the community based on using the most time efficient route.
- Average Number of Private Sector Housing Units for Sale/Rent - Enter the average number of housing units (do not count income producing properties such as farms) available for sale and for rent in each community. An estimate of the average number of housing units one can expect to be for sale and for rent at any time in a community is compiled from past real estate and rental statistics. Where more than one IHS facility is within 45 miles of the community, assume that the number of private sector quarters units available to the IHS staff in that community (i.e., the average vacancy rate determined in the housing verification survey) will be used to calculate housing available for each nearby facility. The vacancy rate is a recurring rate to which the local economy will continue to adjust and that will remain constant over time. Therefore available vacant private sector housing should not be prorated among nearby facility locations.
- Period Covered by Survey - Enter the dates covered by local private sector housing survey. Because of the cyclic nature of many housing and rental markets, it is recommended that a minimum of one year of historical data (available from local real estate offices, lending institutions, tribal offices, etc.) be evaluated at sufficient intervals to provide a realistic average.

D. Additional Government Quarters Units Required

The information described in the previous sections for Phase II (Exhibits 2 through 5) is used to determine the number of additional Government quarters units required. This information is summarized, evaluated, and prioritized in the "Phase II - Summary" worksheet illustrated in Exhibit 6. Table 1, which was used in Phase I, is utilized to determine the Isolation Factor for this worksheet. Instructions for completing Exhibit 6 worksheet are described below. The information in this worksheet must be consistent with the other data provided in Phase II as described in the preceding sections of this technical handbook.

- Area - Enter the name of the IHS Area Office.

---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING

---

**PART 12 - PRIORITY SYSTEMS**

---

- Date - Enter the date this QCPS Phase II worksheet was completed.
- Service Unit - Enter the name of the IHS service unit in which the proposed new quarters units will be located.
- Location - Describe the specific location within the service unit where the proposed new quarters units will be located. If appropriate, use the installation name which matches the IHS QTIS database.
- Contact Person/Telephone - Provide the name and telephone number of the person at the Area Office or service unit to contact if additional information is required about the worksheet.
- Total Authorized Positions Supported by IHS (A) - List those positions which have been congressionally authorized for the location where new quarters units are proposed. The "currently filled" authorized positions are those for which staff have been hired at the time the Phase II QCPS worksheet is completed, while "vacant" positions are those for authorized vacancies which have not been filled. If additional positions are to be supported once a new or improved health care facility is completed, enter these as "new" positions. This number must match the staffing requirements included in the approved PJD for the health care facility. The sum of currently filled, vacant, and new positions is entered as the "Total Authorized Positions Supported by IHS."
- Number of Government Owned or Leased Quarters Units Currently Occupied by "Non-Local" IHS Staff (B) - This is the number of IHS, Bureau of Indian Affairs (BIA), or other Government owned or leased quarters units which are currently occupied by non-local IHS staff. The term "non-local" refers to those IHS employees who resided more than 70 road km from the health care facility at the time of their employment in that facility.

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

**Exhibit 6**                      **Quarters Construction Priority System**  
**Phase II - Summary**

Area _____	Date _____
Service Unit _____	Location _____
Contact Person _____	Telephone _____
Total Authorized Positions Supported by IHS Currently Filled _____ + Vacant _____ + New _____ = (A) _____	
Number of Government Owned or Leased Quarters Units Currently Occupied by "Non-Local" IHS Staff (B) _____	
Number of Quarters Units Required for "Non-Local" Staff Expected to Fill "Vacant" and "New" IHS Positions: Vacant _____ + New _____ = _____ x 0.9 = (C) _____	
Total Quarters Units Required = (B+C) (D) _____	
Number of Existing IHS Quarters Units (E) _____	
Number of "Poor" or "Obsolete/Substandard" IHS Quarters Units (F) _____	
Number of Other Government Quarters Units Available to IHS Agency _____ (G) _____	
Total Government Quarters Units Available = E - F + G (H) _____	
Average Number of Local Private Sector Housing Units For Sale _____ + For Rent _____ = (I) _____	
Number of Local Private Sector Housing Units Which Are Suitable and Available to IHS Staff = 0.25 X (I) (J) _____	
Additional Government Quarters Units Required = D - H - J (K) _____	
Quarters Requirement Ratio = 100(K/A) (If negative, enter 0) (L) _____	
Weighted Isolation Factor (from tabulations below) (M) _____	
QUARTERS CONSTRUCTION PRIORITY SCORE = L x M (N) _____	

WEIGHTED ISOLATION FACTOR							
List in order (closest first), the three closest communities with a population of at least 1,500. Use Table I to find the Isolation Factor.							
COMMUNITY, STATE	POPULATION	DISTANCE (ROAD KM)	ISOLATION FACTOR				
				X	0.5	=	
				X	0.3	=	
				X	0.2	=	

---

**PART 12 - PRIORITY SYSTEMS**

---

- Number of Quarters Units Required for "Non-Local" Staff Expected to Fill "Vacant" and "New" IHS Positions (C) - This is determined by estimating the number of currently vacant IHS positions and new IHS positions that are expected to be filled with "non-local" staff, i.e., employees residing greater than 70 road km from the health care facility at the time of their employment in that facility. This should be a realistic estimate taking into account the type of positions to be filled, the availability of qualified personnel from the local area, and past experience. It is expected that the ratio of non-local staff to total staff for the currently filled positions would provide a close approximation in determining this ratio for new and vacant positions. This total (vacant plus new positions to be filled with "non-local" staff) is multiplied by 90 percent to estimate the number of quarters units required. The 90 percent adjustment factor is based on the assumption that 10 percent of the non-local staff will prefer to build their house, choose to live more than 70 road km from the health care facility, or be married to another IHS employee and require only one quarters unit for both.
- Total Quarters Units Required (D) - Total quarters units required is the sum of the Government owned or leased quarters units currently occupied by non-local IHS staff (B) plus the quarters units required for vacant and new IHS positions expected to be filled with non-local staff (C).
- Number of Existing IHS Quarters Units (E) - Enter the number of all existing IHS owned or leased quarters units located 70 road km or less from the health care facility. This number should match the number of quarters units listed in the IHS QTIS database.
- Number of "Poor" or "Obsolete/Substandard" IHS Quarters Units (F) - This is the number of quarters units in the total number of existing IHS quarters units (E) which do not meet minimum standards, i.e., those classified as "poor" or "obsolete/substandard." These classifications, as defined in the Quarters Management Program, Chapter 13, Part V, Indian Health Manual, should be consistent with the designation listed in the IHS QTIS database.
- Number of Other Government Quarters Units Available to IHS (G) - This is the number of other Government quarters units that meet minimum standards which are available to IHS for occupancy by IHS staff. These are units owned or leased by other Government agencies located 70 road km or less from the health care facility. Also identify the Government agency name in the space provided.
- Total Government Quarters Units Available (H) - This is the number of Government quarters units available for occupancy by IHS staff. This is determined by subtracting the number of poor or obsolete/substandard quarters units (F) from the sum of the existing IHS quarters units (E) and the number of other Government owned or leased quarters units available to IHS (G).

---

**PART 12 - PRIORITY SYSTEMS**

---

- Average Number of Local Private Sector Housing Units (I) - This is obtained from the "Phase II - Local Private Sector Housing Market" worksheet. It represents the average number of housing units that can be expected to be available for sale and rent at any one time from the local private sector.
- Number of Local Private Sector Housing Units Which Are Suitable and Available to IHS Staff (J) - This is 25 percent of the average number of local private sector housing units for sale or rent (I). Not all local private sector housing units identified in the "Phase II - Local Private Sector Housing Market" worksheet will be suitable and available to IHS staff at the time it is required. It is assumed that only one out of four units will be both suitable to a particular employee's needs and also be available at the time it is required by that employee.
- Additional Government Quarters Units Required (K) - This is the total number of quarters units required (D) minus the number of available Government quarters units (H) and minus the available local private sector housing units (J). This is the number of additional quarters units required to house non-local employees for whom Government quarters units are not available. If this number is less than one, no additional Government quarters units are required.
- Quarters Requirement Ratio (L) - This is 100 times the ratio of the additional Government quarters units required (K) to the total authorized positions supported by IHS (A). If this ratio is negative (because there is a negative need for additional quarters units), enter zero as the quarters requirement ratio.
- Weighted Isolation Factor (M) - This factor is the same as previously determined in Phase I and is used to adjust the quarters requirement ratio to account for the relative isolation of a specific health care facility location. The data is compiled in the tabulations at the bottom of the "Phase II - Summary" worksheet. The model used to determine the weighted isolation factor assumes that relative isolation is directly proportional to the distance a specific location is from communities with a population of at least 1,500. It also assumes that the larger the population of a nearby community, the lower the isolation factor, i.e., isolation of a location is inversely proportional to the population of the adjacent communities.

Table I (from Phase I) provides an isolation factor for communities with various distance and population combinations. The "weighted isolation factor" is determined by evaluating the isolation factor for the three closest communities with a population of at least 1,500, including the community in which the health care facility is located, if appropriate. These three isolation factors are combined into a single weighted isolation factor by allocating 50 percent of the factor for the closest community, 30 percent for the second closest community, and 20 percent for the third closest community.



---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

---

When completing the tabulations at the bottom of the Phase I QCPS worksheet to determine the weighted isolation factor, use population and distance figures taken from the latest edition of the Rand McNally Road Atlas. The distance is based on road kilometers using the most time efficient route. For locations where a community is not accessible by roads (e.g., rural locations in bush Alaska), a maximum isolation factor of 1.00 is applied.

- QUARTERS CONSTRUCTION PRIORITY SCORE (N) - This is the product of the "weighted isolation factor" and the "quarters requirement ratio." The highest possible score is 100, but typical values will be less than 40.

### 12-2.5 PHASE III

Area Offices submitting proposals which receive the highest scores in Phase II are invited to submit Phase III proposals. During Phase III, the appropriate Area Office verifies, updates, and supplements Phase II information, and prepares a PJDQ for proposals still being considered. One requirement of the PJDQ is for the appropriate ES to prepare a HVSR which the Area Office uses in the PJDQ to justify the number of quarters units proposed for construction. Quarters construction is justified only if the number of local Government and local private sector housing units available is less than the number of quarters units required to meet the health care facility staffing requirements.

#### A. Housing Verification Survey Report

The HVSR is a survey of local Government quarters units and the local private sector housing market to determine the number of housing units available for IHS staff at a particular location. The appropriate ES Director designates a two to four member survey team, with at least one representative from ES (team leader) and one from the Area Office. It is desirable, but not required, to have a team member representing the service unit and a member representing the tribe.

Upon completion of the survey, a written report is prepared by ES and submitted to the Area Office for inclusion with the PJDQ. This section describes the general format and information to be provided in the HVSR.

1. Signature Page - Provide a signature page for each HVSR indicating the following:
  - Signature and date of the ES team leader who prepared the HVSR.
  - Signature and date of the ES official (e.g., Branch Chief) who reviewed the HVSR and recommends approval.
  - Signature and date of the ES Director approving the HVSR.

---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

---

- Signature and date of the Director, Division of Facilities Planning and Construction, IHS Headquarters, concurring with the HVSR.
2. Table of Contents - Indicate the location (page number) of the chapters, sections, and main subdivisions.
3. Introduction and Purpose - Include the following information in this section:
- Purpose - Describe the reasons for performing the housing verification survey. Indicate that the survey is required for the IHS PJDQ, is being done in accordance with guidelines of this IHS technical handbook, and provides IHS with a verifiable count of both Government and private sector housing units available locally for occupancy by IHS staff.
  - Survey Team - Identify the name and organization of the team leader and members of the survey team.
  - Description of Project - Provide a general overview of the proposed quarters project, including the location of the project and the reason why new staff quarters units are needed (e.g., construction of a new hospital).
  - Description of Survey Area - Provide general information about the survey area which contributes to the living conditions, e.g., geography, demographics, weather, economy, remoteness, etc. Include a general location/site map.
4. Existing Government Quarters Units - Included with Phase II of the QCPS (and provided to the survey team by the Area Office) is a listing of the status of all assignable IHS owned or leased quarters units located 70 road km or less from the health care facility. This same information, as appropriate, is also provided for other Government quarters units located 70 road km or less from the health care facility, which are available to IHS for occupancy by IHS staff. The survey team will verify the accuracy of this information and provide a corrected listing of this data as illustrated in Exhibit 7 for all existing Government quarters units. The listing includes the following:
- Area - Enter the name of the IHS Area Office.
  - Date - Enter the date this HVSR worksheet was completed.
  - Service Unit - Enter the name of the IHS service unit in which the existing Government quarters units are located.
  - Installation Number - Within each service unit, there may be more than one installation. The installation number in which the existing quarters units are located is taken from the IHS QTIS database.

---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

---

- Location/Distance - Include the city, State, and distance the existing Government quarters units are from the health care facility.
- Total Number of Government Quarters Units at This Location - Provide the total number of existing IHS Government quarters units and the total of those owned by other Government agencies (even if they are not available to IHS).
- Owner - List the Government agency that owns the quarters units, e.g., IHS, BIA, Department of Defense, etc.
- Building Number - Enter the five digit number assigned to the quarters unit which matches the IHS QTIS database.
- Quarters Unit Designation - Enter the IHS quarters unit designation as either "rental" or "transient" as defined in the Quarters Management Program, Chapter 13, Part V, Indian Health Manual.
- Quarters Unit Description - Enter the type of quarters unit, e.g., "Residence 2BR", "Apartment 1BR", "Trailer 2BR", etc., which matches the IHS QTIS database.

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

**Exhibit 7**

Housing Verification Survey Report  
**Existing Government Quarters Units**

Area \_\_\_\_\_ Date \_\_\_\_\_  
Service Unit \_\_\_\_\_ Installation No. \_\_\_\_\_  
Location \_\_\_\_\_  
Distance From Health Facility \_\_\_\_\_ km  
  
Total Number of Quarters Units at This Location \_\_\_\_\_  
(IHS) (Other Govt.)

Owner	Building Number	Quarters Designation	Quarters Description	Internal Condition	External Condition

---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

---

- Internal Condition - Enter the rating which matches the IHS QTIS database. The Quarters Management Program, Chapter 13, Part V, of the Indian Health Manual establishes the following quarters unit quality ratings: excellent, good, fair, poor, and obsolete/substandard. This rating is reported in the IHS QTIS database. The Area Realty Officer, with assistance from the Area facilities management staff determines the quality rating each time a quarters unit is reconditioned or made available for occupancy. An inspection to verify the quality condition is necessary only for those units for which the internal or external condition is listed as poor or obsolete/substandard. Poor is defined as needing major repairs; substantial deferred maintenance is evident. An obsolete/substandard condition is one in which the quarters unit is not fit for human habitation; major health and safety violations are evident. The IHS Quarters Management Program requires that any quarters unit designated in the poor or obsolete/substandard condition must be repaired and upgraded to at least fair condition within 1 year from date of such designation. Otherwise, disposal action or reclassification will be initiated. Both the internal and external quarters unit condition must be rated at least fair in order to be suitable for the intended occupant.

- External Condition - Use the same criteria as "internal condition" above.

For each unit designated as poor or obsolete/substandard, include the following supplemental information as an attachment to this listing:

- Deficiencies - Describe the major deficiencies of the quarters unit which is the basis for the poor or obsolete/substandard quality rating.
- Cost Estimate - Provide a cost estimate to renovate and correct the major deficiencies of the unit.
- Feasibility - Determine the economic feasibility of renovating the unit versus constructing a replacement unit. Factors to be considered in this evaluation include cost of renovation versus cost of a new unit, projected service life of the unit, operation and maintenance requirements, etc.
- For quarters units determined to be unfeasible to renovate, recommend how these units are to be disposed of after they are replaced with a new quarters unit.
- A site map showing the location of existing Government units in relation to the health care facility should also be provided.

5. Local Private Sector Housing Market - In this section of the HVSR, describe the local private sector housing units available for sale and rent in communities located 70 road km or less from the health care facility. The surveyed communities (including the community in which the health care facility is located) consist of all local "recognized" communities and other local communities where a "demonstrated preference" to reside is indicated. Population and distance (based on road km using the most efficient time route) figures are taken from the latest edition of the Rand McNally Road Atlas.
- Recognized Community - An incorporated or unincorporated city or town (located 70 road km or less from the health care facility) having a year-round population of 1,500 or more.
  - Demonstrated Preference Community - An incorporated or unincorporated city or town (located 70 road km or less from the health care facility) having a year-round population of less than 1,500, and where a demonstrated preference to reside is indicated by current non-local IHS staff presently residing in this community. Non-local refers to employees who resided more than 70 road km from the health care facility at the time of their employment in that facility. Where more than one IHS facility is within 45 miles of the community, assume that the number of private sector quarters units available to the IHS staff in that community (i.e., the average vacancy rate) will be used to calculate housing available for each nearby facility. The vacancy rate is a recurring rate to which the local economy will continue to adjust and that will remain relatively constant over time. Therefore available vacant private sector housing should not be prorated among nearby IHS facility locations.

The survey team should explore the following resources, as appropriate, to obtain information about each of the communities surveyed. This will enable an accurate accounting of available private sector housing units. When possible, the team should make appointments to meet with these people, rather than "drop-in" unexpectedly.

- Local Realtors - Contact local Realtors to acquire sales history, market conditions, availability, unit size, average time on the market, selling prices, trends, etc.
- Property Management Companies - These companies are a source of rental unit information because they often provide management services for owners of multiple-family units (apartments, townhomes, condominiums, etc.) and single family residences.
- Financial Institutions - Information can be obtained from banks, savings and loans, and credit unions concerning real estate activities, mortgage loan information, interest rates, special financing programs, repossessed houses, etc.

---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

---

- Chamber of Commerce/Community Development Offices - Detailed information is often available regarding community amenities, services, transportation, industries, retail stores, and recreational activities.
- Utility companies - Local utility companies (electric, gas, etc.) are often a good source for community profiles, services, demographic trends, etc.
- Title Companies - Title companies are a good source for information regarding past real estate activity.
- Clerk and Recorder/Assessors Offices - Records of past transactions can be obtained at the County seat.
- Tribal Housing Authorities - Tribal Housing Authorities should be contacted since the tribe may own housing units that could be available for IHS employees to rent.
- Department of Housing and Urban Development (DHUD) - The regional DHUD office can provide information on foreclosures and general real estate activity.

For each recognized and demonstrated preference community (including the community in which the health care facility is located) that is located 70 road km or less from the health care facility, provide the following information:

- Community name and State
- Location/Population - Road km and direction from the health care facility. Reference an attached site map which shows the location of the community relative to the health care facility. Population and distance (based on road km using the most efficient time route) figures are taken from the latest edition of the Rand McNally Road Atlas.
- Method of Access - Type, size, condition, and general maintenance of roads from the community to the health care facility. Include the type and frequency of restricted driving conditions or road closures due to weather, etc. Describe the availability of public transportation.
- Services/Amenities Available - Describe the availability of community services, educational opportunities, medical/dental care, fire and police protection, retail services, employment opportunities, recreational facilities, and any other pertinent information which helps characterize the community.
- Number of current non-local staff residing in this community.
- Average Number of Housing Units for Sale - Provide historical data on the average number of housing units (do not count farm or income producing properties) available for sale at any time. Because of the cyclic nature of many housing

---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

---

markets, it is recommended that a minimum of one year of historical data be evaluated at sufficient intervals to provide a realistic average. Provide the data by number of bedrooms and sales price in a tabular format as illustrated in Exhibit 8.

- Average Number of Housing Units for Rent - Provide historical data on the average number of housing units (do not count farm or income producing properties) available for rent at any time, i.e., the average vacancy rate multiplied by the total number of rental units. Data should cover at least the most recent one year period and be evaluated at sufficient intervals to provide a realistic average. Provide the data by number of bedrooms and monthly rental price in a tabular format as illustrated in Exhibit 8.
  - Sources of Data - Provide the sources of data for each community. Include the name, job title, company name, address, and phone number of sources. This information will be used for future verification and updates.
6. Staff Interviews - The survey team shall interview a representative sample of IHS non-local staff and report their findings in this section of the HVSR. The purpose of these interviews is to determine the staff housing preferences and opinions concerning the local conditions. Examples of questions would be regarding turnover of staff, rent versus purchase, local housing options, travel distances, Government housing, desire to build, personal preferences, etc. It is recommended these interviews be conducted in groups of three to five to foster group interaction and stimulate discussion.
7. Summary and Conclusions - A summary of the information reported in the previous sections of the HVSR will be presented in this section in the format illustrated in Exhibit 9. This summarizes the results of the survey concerning the number of local Government quarters units and local private sector housing units which may be reasonably expected to be available for non-local IHS employees at a particular location.

When summarizing this information, all existing IHS Government quarters units are counted. This total is reduced by the number of "poor" and "obsolete/substandard," units that are unfeasible to renovate. Other Government quarters units located 70 road km or less from the health care facility are counted only to the extent they are available to IHS for occupancy by IHS staff.

The assumption is made that only 25 percent of the housing units from the local private sector housing market will be suitable, available, and affordable to non-local IHS employees. If the survey team considers a 25 percent adjustment factor either too high or too low for a specific location, a more realistic factor should be recommended and supported with justification. The components which comprise this adjustment factor are as follows:



---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

---

- Suitability - Not all housing units will be suitable to IHS employees because of the condition, size, or location of the units within a recognized community.
  - Availability - Seasonal variations in the housing market and the relative supply and demand for housing influence the number of units that may be available to an employee.
  - Affordability - This relates to the income of the employee relative to the cost of housing. It also pertains to the local real estate market, e.g., ability to sell or sublet if transferred, rate of appreciation, interest rates, etc.
8. Attachments - Include in this section pertinent information such as area maps, photos, and published data from local civic organizations and Realtors.
- B. Program Justification Document/Program of Requirements for Quarters

After completion of the HVSR, the culmination of the QCPS process is the Area Office's submission of a PJDQ that justifies the number of quarters (transient and rental) units proposed for construction. A prototype PJDQ is found in Chapter 13-6 of this Handbook. Most of the information required for the PJDQ can be compiled from the HVSR and by updating information from the Phase II application.

Headquarters IHS reviews the PJDQ, and if it determines that construction of additional quarters units is adequately justified, the PJDQ is approved by the Associate Director, OEHE. After approval, these projects are added to the bottom of the Quarters Construction Priority List in the order they are approved.

**PART 12 - PRIORITY SYSTEMS**

**Exhibit 8**      Housing Verification Survey Report  
Local Housing Market

Community _____		Population _____				
Distance from IHS Health Care Facility: _____ km.						
Survey Period ____ To ____		Average Number of Units for <b>SALE</b>				
Purchase Price		1 Bedroom	2 Bedroom	3 Bedroom	4 Plus Bedroom	Total
Less than \$35,000						
\$35,000 to \$45,000						
\$45,000 to \$55,000						
\$55,000 to \$65,000						
\$65,000 to 80,000						
\$80,000 to \$95,000						
\$95,000 to \$110,000						
\$130,000 to \$150,000						
More than \$150,000						
Total						

Monthly Lease		Average Number of Units for <b>RENT</b>				
		1 Bedroom	2 Bedroom	3 Bedroom	4 Plus Bedroom	Total
Less than \$300						
\$300 to \$400						
\$400 to \$500						
\$500 to \$600						
\$600 to 750						
\$750 to 900						
900 to 1,300						
\$1,300 to \$1,500						
More than \$1,500						

---

TECHNICAL HANDBOOK FOR ENVIRONMENTAL HEALTH AND ENGINEERING  
VOLUME II - HEALTH CARE FACILITIES PLANNING  
**PART 12 - PRIORITY SYSTEMS**

---

**Exhibit 9**      Quarters Construction Priority System  
Housing Verification Survey Report Summary

Number of Existing IHS Government Quarters Units .....	(A) _____
Number of IHS Government Quarters Units that are either "Poor" or "Obsolete/Substandard" AND Unfeasible to Renovate .....	(B) _____
Number of Other Government Quarters Available to IHS .....	(C) _____
TOTAL GOVERNMENT QUARTERS UNITS AVAILABLE = A - B + C .....	(D) _____
Average Number of Private Sector Housing Units Available in Local "Recognized" Communities and in Other Local Communities where a "Demonstrated Preference" to Reside is Indicated: For Sale .....	(E) _____
For Rent .....	(F) _____
TOTAL LOCAL PRIVATE SECTOR HOUSING UNITS SUITABLE, AVAILABLE, AND AFFORDABLE TO IHS STAFF = 0.25(E + F) .....	(G) _____
TOTAL SUPPLY OF HOUSING UNITS = D + G .....	(I) _____